

DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE

Supplementary Summer Semester Examination – 2026

Course: Common to All Branches

Semester: II

Subject Code & Name: Computer Programming in C (BTES204)

Max Marks: 60

Date: 16th July 2026

Duration: 3 Hr.

Instructions to the Students:

- 1 Each question carries 12 marks.
- 2 Question No. 1 will be compulsory and include objective-type questions.
- 3 Candidates are required to attempt any four questions from Question No. 2 to Question No. 6.
- 4 The level of question/expected answer as per OBE or the Course Outcome (CO) on which the question is based is mentioned in () in front of the question.
- 5 Use of non-programmable scientific calculators is allowed.
- 6 Assume suitable data wherever necessary and mention it clearly.

Marks

Q. 1 Objective type questions. (Compulsory Question)

12

- | | | |
|----|--|---|
| 1 | Which statement immediately skips remaining statements of the current loop iteration? | 1 |
| | a) break b) goto c) return d) continue | |
| 2 | The _____ statement transfers control to a labeled statement in the same function. | 1 |
| | a) break b) goto c) continue d) return | |
| 3 | The process of correcting errors after identifying them during program execution is called _____. | 1 |
| | a) Debugging b) Compiling c) Editing d) Linking | |
| 4 | A string in C is stored as a _____ array. | 1 |
| | a) character b) integer c) floating-point d) boolean | |
| 5 | Which declaration correctly defines a structure variable named emp for an existing structure Employee? | 1 |
| | a) Employee emp; b) struct emp Employee; | |
| | c) Employee struct emp; d) struct Employee emp; | |
| 6 | _____ command is generally used to start program execution after successful compilation. | 1 |
| | a) Save b) Build c) Refresh d) Run | |
| 7 | A structure member is accessed using _____ operator when a structure variable is used. | 1 |
| | a) dot (.) b) arrow (->) c) scope (::) d) ampersand (&) | |
| 8 | An array whose elements are structures is called an _____. | 1 |
| | a) Structure pointer b) Array of structures c) Nested structure d) Structure variable | |
| 9 | The keyword used to declare a character variable in C is _____. | 1 |
| | a) char b) string c) character d) text | |
| 10 | Which declaration correctly creates an array capable of storing 50 floating-point values? | 1 |
| | a) int a[50]; b) float a; c) float *a; d) float a[50]; | |
| 11 | The _____ statement is used to repeatedly execute a block of code while a condition remains true. | 1 |

	a) while b) switch c) goto d) return	
12	Which operator is commonly used to perform explicit type conversion in C?	1
	a) sizeof b) :: c) (type) d) typeof	
Q. 2	Solve the following.	12
A)	Explain the difference between syntax errors and logical errors with suitable examples.	6
B)	Design a basic flowchart and algorithm to input two numbers and display the larger one.	6
Q. 3	Solve the following.	12
A)	Explain arithmetic operators and assignment operators using suitable examples.	6
B)	Write an algorithm using conditional expressions to find the maximum of three numbers.	6
Q. 4	Solve Any Two of the following.	12
A)	Explain the working of nested if statements with a suitable example.	6
B)	Explain the difference between break, continue, and goto statements with examples.	6
C)	Define a function prototype. State the purpose of the return statement. Define global variables.	6
Q. 5	Solve Any Two of the following.	12
A)	Explain the difference between one-dimensional and two-dimensional arrays with syntax and examples.	6
B)	Develop an algorithm to find the smallest element in an array.	6
C)	Write a program to input and display a 2×2 matrix.	6
Q. 6	Solve Any Two of the following.	12
A)	What is an array of structures? State the syntax for accessing structure members. Define a structure variable.	
B)	Design a structure to store product details and write a program to display them.	6
C)	Design a structure in C to store the examination details of a student, including Roll Number, Student Name, and marks obtained in three subjects. Write a C program that accepts the student's information, calculates the total marks and percentage, and assigns a grade based on the following criteria:	6
	• Grade A: Percentage $\geq 75\%$ • Grade B: Percentage $\geq 60\%$ and $< 75\%$ • Grade C: Percentage $\geq 50\%$ and $< 60\%$ • Grade D: Percentage $\geq 40\%$ and $< 50\%$ • Grade F: Percentage $< 40\%$	

The program should display the student's details, total marks, percentage, and the assigned grade using the structure. Assume that the maximum marks for each subject are 100.

*** End ***